

Commonwealth of Kentucky
Division for Air Quality
RESPONSE TO COMMENTS

Proposed

Title V/Synthetic Minor, Construction / Operating

Permit: V-07-027

Princeton Peaking Plant

Princeton, KY 42445

November 15, 2007

Esmail Hassanpour, Reviewer

SOURCE ID: 21-033-00038

AGENCY INTEREST: 85174

ACTIVITY: APE20070001

SOURCE DESCRIPTION:

The Princeton Peaking Plant applied to the Kentucky Division for Air Quality on May 5, 2007, to construct and operate an electric generating facility in Princeton, KY. Additional information was provided to the Division on August 20, 2007. The electricity will be generated using nine Caterpillar Model 3516 B reciprocating engines, or similar equipment. The engines will be used to meet peak electricity demand. The reciprocating engines offer quick-start capability and will drive generators to produce electric power for distribution. Each engine will have an approximate heat input of 21.74 MMBtu/hr (HHV) with nominal output of 2 MW. The units use No. 2 fuel oil. Combined operating hours for all engines will be limited to 7800 hours per year. Two 32,000 gallons storage tanks will be constructed as part of the project. These two tanks are now insignificant activities, are moved from the permit Section B to Section C, and are exempt from Regulation 401 KAR 60:005, Sections 2 and 3(1)(q) - incorporates by reference 40 CFR Part 60.110b to 60.117b (Subpart Kb). Maximum throughput of No. 2 fuel oil will be 1, 37 9,700 gallons per year. This throughput may be through a single tank or split between the two tanks.

PUBLIC AND U.S. EPA REVIEW:

On September 12, 2007, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in the Times Leader in Princeton, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Princeton peaking Plant on September 24, 2007. Attachment A to this document lists the comments received and the Division's response to each comment. Minor changes were made to the permit, Statement of Basis, and Summary as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit. The U.S. EPA has 45 days to comment on this proposed permit.

ATTACHMENT A

Response to Comments

Comments on Louisville Princeton Peaking Plant, Draft Title V Air Quality Permit submitted by Mr. Bill Stark, Senior Consultant

Permit Statement of Basis:

For Emission Units 01-09

First paragraph on p. 2: 40 CFR 60.4204(c) (1) applies to engines with displacement greater than 30 L per cylinder. The proposed engines will have 16 cylinders and a total displacement of 69 liters, or 4.3 liters per cylinder. Emission limits for engines such as these are found in 40 CFR 60.4204(b).

Division's response: Comment acknowledged, and the change has been made.

Second paragraph on p. 2: for the reasons noted above 40 CFR 60.4204(c)(2) does not apply.

Division's response: Comment acknowledged, and the change has been made.

Fourth paragraph on p. 2: 40 CFR 60.4204(d)(2) applies to engines with displacement greater than 30 L per cylinder.

Division's response: Comment acknowledged, and the change has been made.

Emissions and Operating Caps Descriptions:

First paragraph on p. 2: CO should be limited to 240 tons per year per the emission calculations in the permit application.

Division's response: The Division does not concur. The Statement of Basis language will not change. The limit is established to provide an adequate margin to preclude PSD applicability.

Permit Application Summary Form:

With the exception of PM/PM10, emission limits in the Emissions Summary Table are inconsistent with the emission calculations in the permit application.

Division's response: Comment acknowledged, and the change has been made.

Emissions and Operating Caps Descriptions:

CO should be limited to 240 tons per year per the emission calculations in the permit application. is it possible to add "or similar" after Caterpillar Model 3516 B?

Division's response: The Division does not concur. The Summary language will not change.

The limit is established to provide an adequate margin to preclude PSD applicability. The "or similar" phrase has been added.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS:

Emission Units 01 - 09

Description:

Applicable Regulations:

- 2. Emission Limitations:** 40 CFR 60.4204(c)(1) applies to engines with displacement greater than 30 L per cylinder. Emission limits on the proposed engines are found in 40 CFR 60.4204(b).

Division's response: Comment acknowledged, and the change has been made.

Compliance Demonstration Method:

- b.** The applicable requirement should be 40 CFR 60.4211(c) and the emission limits are in 4204(b)

Division's response: Comment acknowledged, and the change has been made

3. Testing Requirements:

- a.** 40 CFR 60.4213 is not applicable. 40 CFR 60.4212 is the applicable requirement

Division's response: Comment acknowledged, and the change has been made.

- b.** The applicable requirement is 40 CFR 60.4212(a) and requires testing according to 40 CFR 1039 Subpart F **c, d, e:** 40 CFR 60.4213(b), (c), and (d) are not applicable

Division's response: Comment acknowledged, and the change has been made.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 2.** CO should be limited to 240 tons per year per the emission calculations in the permit application.

Division's response: The Division does not concur. The permit language will not be changed. The limit is established to provide an adequate margin to preclude PSD applicability.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.